

### **REMARKS**

Applicants appreciate the Examiner's thorough review of the present application, and respectfully request reconsideration in light of the preceding amendments and the following remarks.

Claims 11-21, 23-27 and 29-32 are pending in the instant application. Several claims have been amended to more clearly define the claimed subject matter. Claims 22 and 28 have been canceled by the Amendment without prejudice or disclaimer. Claims 31 and 32 have been added to secure an appropriate scope of protection to which Applicants are believed entitled. Support for the added claims is believed to be found in Fig. 3 and paragraph [0009] of the published specification of the present specification. No new matter has been introduced through the foregoing amendments.

Applicants appreciatively note that claims 17, 18 and 20 are allowed by the Office. In the Amendment, claims 23-27, 29 and 30 are amended to depend upon allowed claim 17, therefore, claims 23-27, 29 and 30 are believed to be allowable.

Claims 11, 15-16 and 19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over *Saur* (US 4,674,679) in view of *Henschel* (DE 4,231,649). In response, claim 1 is amended to recite that "said guide component includes a radial flange integrated with the hollow cylindrical section and projecting away from the expansion element, said valve spring surrounds the expansion element and the entirety of the hollow cylindrical section and up to the radial flange." (Emphasis added).

The Office at item 7 of the Office Action alleges that Fig. 1 of *Saur* shows a valve spring 12 which surrounds the entire circumference of the hollow cylindrical section/duct 27. Applicants respectfully submit that claim 1 now requires the entirety of the expansion element and the radial flange and the hollow cylindrical section is surrounded by the valve spring, which is clearly distinguished from the structure of *Saur*. In Fig. 1 of *Saur*, the valve spring 12 surrounds the piston 18 and a part of the hollow cylindrical section/duct 27. In other words, the spring 12 does not meet the limitation that the valve spring surrounds the entirety of the hollow cylindrical section as claimed.

Further, as discussed previously, one of ordinary skill in the art would not have modified *Saur*'s valve spring 12 to surround the entirety of the "guide component", e.g., the circled area shown in the annotated Fig.1 of *Saur* in the Office Action, because the duct 27 is formed in the housing 23 and the valve spring 12 cannot be positioned to surround the entirety of the duct 27.

Furthermore, with respect to the "radial flange" feature, it is noted that the Office in item 9 alleges that the modified valve of *Saur* includes a section of the valve housing which supports the valve spring 12 and therefore it is considered an obvious design choice to add a designated flanged support for the spring as is generally known in the art. Applicants respectfully disagree. As illustrated in *Saur*, the spring 12 is directly supported by the housing rather than any other structure. It is respectfully submitted that one of ordinary skill in the art would not have added extra structure to the housing 23, i.e., adding a flange to the housing 23 as proposed by the Office, because the housing 23 itself is enough to support the spring 12. Thus, the applied art fails to disclose or suggest the claimed radial flange and fails to disclose or suggest the claimed feature that the valve spring surrounds the expansion element and the entirety of the hollow cylindrical section and up to the radial flange.

*Henschel* does not cure the deficiencies of *Saur*. As disclosed in Figs. 2-3 of *Henschel*, the spring 6 of *Henschel* is not formed to surround the guide component. Accordingly, claim 11 is patentable over the art and the rejection should be withdrawn.

The rejected dependent claims are patentable by virtue of their dependency as well as on their own merits.

With respect to the feature of claim 19, i.e., the valve spring is directly supported by the radial flange. The other applied art fail to disclose or suggest the claimed radial flange and the relationship between the radial flange and the valve spring. Therefore, claim 19 is patentable over the art.

Claims 12-14 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Saur* in view of *Henschel* and further in view of *Griffin* (US 3,409,039). Applicants respectfully submit that *Griffin* does not cure the deficiencies of *Saur* and *Henschel*, therefore, independent claim 1 is patentable over the applied art. Claims 12-14 and 21 are patentable for the reasons advanced with

respect to claim 1. Accordingly, withdrawal of the rejection is respectfully requested.

The rejection of claims 22-30 under 35 U.S.C. 103(a) at item 4 of the Office Action is overcome in view of the claim amendments above.

Claim 31 dependent upon claim 11 recites that the guide component has a section opposite to the radial flange in the axial direction, the section being engageable with the bypass valve member, and the bypass valve member is freely movable within the hollow cylindrical section between said section of the guide component and the radial flange, see Fig. 3 of the present application for support. It is respectfully submitted that none of the applied art disclose or suggest the claimed feature of claim 31. For instance, in *Saur*, the valve disk 7 regarded by the Office as the claimed bypass valve member is not freely movable within the hollow cylindrical section/duct 27. As disclosed in column 4, lines 12-13 of *Saur*, the valve disk 7 is brought into sealing contact with the valve seat 28 (which actually prevents the valve disk from moving into the duct 27). Therefore, claim 31 is separately patentable over the art.

Independent claim 32 recites the similar feature to claim 31, i.e., the bypass valve member is freely moveable within the hollow cylindrical section of the guide component. Therefore, claim 32 should be patentable over the applied art for at least the reason presented with respect to claim 31 above.

### **Conclusion**

Accordingly, all claims in the present application are in condition for allowance. Early and favorable indication of allowance is courteously solicited. Early issuance of a Notice of Allowance is courteously solicited.

The Examiner is invited to telephone the undersigned, Applicants' attorney of record, to facilitate advancement of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

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